AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A computer-implemented method of managing a file lifecycle, the method comprising the steps of storing data on a storage medium comprising:

associating a set of lifecycle policies with a file in a file system, wherein said lifecycle policies relate to aspects of file classification and file disposition including at least ~~two~~ one of: file creation, file retention, file reference, file non-use, file security, file protection, file preservation, file storage locations within a storage medium, cost effective storage of a file, ~~and~~/or file expiration;

storing said file on said storage medium accessible by a computer according to said set of lifecycle policies;

automatically determining from the associated lifecycle policies whenever said file is to be moved; ~~and,~~

automatically moving said file according to the associated lifecycle policies to another storage location within said storage medium or within a different storage medium whenever the associated lifecycle policies determine that said file is to be moved; and

providing transparent access to said file regardless of where the file is created, located, or moved to, independently of an application or a user.

Claim 2 (previously presented): A method of managing a file lifecycle according to claim 1 comprising the steps of:

providing a plurality of storage media including the storage medium, each having associated therewith a set of lifecycle policies, the policies such that when a condition is met the file is transferred from one storage medium to another in accordance with a lifecycle stage of the file.

Claim 3 (original): A method of managing a file lifecycle according to claim 2 wherein a first storage medium is associated with active files and a last storage medium is associated with archived files and wherein the file is transferred from the first storage medium to the last storage medium in successive stages.

Claim 4 (previously presented): A method of managing a file lifecycle according to claim 3, wherein a file is automatically transferred to a storage medium most appropriate for its stage of lifecycle determined in accordance with the lifecycle policies.

Claim 5 (previously presented): A method of managing a file lifecycle according to claim 4 wherein the lifecycle policies relate to at least some of: the associated storage medium, the file name, the file extension, the file creation date, the file access date, the file last access date, the file creator, and/or the current file owner.

Claim 6 (previously presented): A method of managing a file lifecycle according to claim 1 wherein the step of storing the file on a storage medium comprises the step of determining, in accordance with the lifecycle policies, expiration data relating to when the file is to be moved.

Claim 7 (original): A method of managing a file lifecycle according to claim 6 wherein the step of automatically determining when the file is to be moved comprises the step of comparing the expiration data to present time data to determine if it is indicative of the file having expired its time on the storage medium or on the entire system.

Claim 8 (currently amended): A computer-implemented method of managing a file lifecycle, the computer-implemented method comprising the steps of storing data on a storage medium comprising:

providing a virtual storage medium having a plurality of storage media associated therewith, wherein said plurality of storage media are accessible by a file system in a computer, and having associated therewith a set of lifecycle policies relating to at least ~~two~~ one of: file storage locations within at least one of said plurality of storage media, file creation, file retention, file reference, file non-use, file security, file protection, file preservation, cost effective storage of a file, and/or file expiration, wherein a file lifecycle comprises aspects of file management including: file classification ~~and/~~or file storage disposition;

storing said file on at least one of said plurality of storage media accessible by a computer within said virtual storage medium;

at intervals, determining from the associated lifecycle policies actions dictated by said lifecycle policies for performance on said file; ~~and~~,

performing said dictated actions on said file; and

providing transparent access to said file regardless of where the file is created, located, or moved to, independently of an application or a user.

Claim 9 (original): A method of managing a file lifecycle according to claim 8 wherein a first storage medium is associated with active files and a last storage medium is associated with archived files and wherein the file is transferred from the first storage medium to the last storage medium in successive stages.

Claim 10 (Previously presented): A method of managing a file lifecycle according to claim 9, wherein a file is automatically transferred to a storage medium most appropriate for its stage of lifecycle determined in accordance with the lifecycle policies.

Claim 11 (Previously presented): A method of managing a file lifecycle according to claim 10 wherein the lifecycle policies relate to at least some of the associated storage medium, the file name, the file extension, the file creation date, the file access date, the file last access date, the file creator, and the current file owner.

Claim 12 (Previously presented): A method of managing a file lifecycle according to claim 8 wherein the step of storing the file on a storage medium comprises the step of determining, in accordance with the lifecycle policies, expiration data relating to when the file is to be moved.

Claim 13 (original): A method of managing a file lifecycle according to claim 12 wherein the step of automatically determining when the file is to be moved comprises the step of comparing

the expiration data to present time data to determine if it is indicative of the file having expired its time on the storage medium.

Claim 14 (previously presented): The method of claim 1, further comprising:

providing a virtual cabinet having a plurality of virtual drawers, where each virtual drawer is associated with at least one storage medium, and when a single drawer is associated with a plurality of storage media, said associated storage media are of a similar nature to each other;

providing a plurality of lifecycle policies, a lifecycle policy associated with each virtual drawer;

storing the file in a virtual drawer by storing the file on at least a storage medium associated with the virtual drawer;

at intervals, determining from the lifecycle policy associated with the virtual drawer an action dictated by the lifecycle policy; and,

performing the dictated action on the file.

Claim 15 (previously presented): A method of managing a file lifecycle according to claim 14 wherein the action includes the step of deleting the file from the virtual drawer.

Claim 16 (previously presented): A method of managing a file lifecycle according to claim 15 wherein the lifecycle policies relate to the storage medium and to dates stored in association with each file.

Claim 17 (previously presented): A method of managing a file lifecycle according to claim 16 comprising the step of:

storing in association with each file an expiration indicator indicative of when the file is to be transferred.

Claim 18 (Previously presented): A method of managing a file lifecycle according to claim 17 wherein the expiration indicator includes a date on which to delete the file from the drawer in accordance with the action dictated by the lifecycle policy.

Claim 19 (previously presented): A method of managing a file lifecycle according to claim 17 wherein the expiration indicator includes a minimum time before which the file is to be maintained in its current drawer.

Claim 20 (previously presented): A method of managing a file lifecycle according to claim 15 wherein the action includes the step of transferring the file from the virtual drawer to another different virtual drawer within the cabinet.

Claim 21 (previously presented): A method of managing a file lifecycle according to claim 20 wherein step of transferring the file includes the step of archiving the file within an archiving virtual drawer.

Claim 22 (Previously presented): A method of managing a file lifecycle according to claim 15 wherein step of deleting the file includes the steps of determining based on a drawer policy associated with the drawer and based on data stored in association with the file a mode of deletion, and deleting the file in accordance with the determined mode.

Claim 23 (previously presented): A method of managing a file lifecycle according to claim 22 wherein the modes of deletion include secure deletion and insecure deletion.

Claim 24 (previously presented): A method of managing a file lifecycle according to claim 14 wherein files stored in the virtual cabinet are stored within a same virtual storage medium and wherein files stored within each drawer from the plurality of virtual drawers are stored on the one or more similar storage media associated with said drawer.

Claim 25 (previously presented): A method of managing a file lifecycle according to claim 24 wherein a single virtual drawer forms part of a plurality of virtual cabinets.

Claim 26 (Previously presented): A method of managing a file lifecycle according to claim 14 wherein the step of determining an action comprises the steps of:

determining from the lifecycle policy a condition;

evaluating each file to determine a presence of the condition; and,

when the condition is met, providing an action associated with the condition as the determined action.

Claim 27 (Previously presented): The method of claim 1, further comprising the steps of:

providing a virtual cabinet having a plurality of virtual drawers, where each virtual drawer is associated with at least one storage medium, and when a single drawer is associated with a plurality of storage media, the associated storage media are of a similar nature to each other;

providing a plurality of lifecycle policies, a lifecycle policy associated with each virtual drawer;

storing the file in a virtual drawer by storing the file on at least a storage medium associated with the virtual drawer;

upon receiving an access request to access the file, determining from the lifecycle policy associated with the virtual drawer an action dictated by the lifecycle policy; and,

performing the dictated action on the file.

Claim 28 (Previously presented): A method of managing a file lifecycle according to claim 27 wherein the determined action comprises the step of:

storing in association with each file an expiration indicator indicative of when the file is to be transferred, the expiration indicator determined based on the lifecycle policy.

Claim 29 (Previously presented): A method of managing a file lifecycle according to claim 28 wherein the expiration indicator includes a date on which to delete the file from the drawer in accordance with the action dictated by the lifecycle policy.

Claim 30 (previously presented): A method of managing a file lifecycle according to claim 28 wherein the expiration indicator includes a minimum time before which the file is to be maintained in its current drawer.

Claim 31 (previously presented): A method of managing a file lifecycle according to claim 27 wherein the action includes the step of transferring the file from the virtual drawer to another different virtual drawer within the cabinet.

Claim 32 (previously presented): A method of managing a file lifecycle according to claim 31 wherein step of transferring the file includes the step of retrieving the file from an archiving virtual drawer and storing it in another virtual drawer.

Claim 33 (Previously presented): A method of managing a file lifecycle according to claim 27 comprising the steps of determining based on a lifecycle policy associated with the drawer and based on data stored in association with the file whether the file is to be deleted;

determining based on a lifecycle policy associated with the drawer and based on data stored in association with the file a mode of deletion for the file; and

deleting the file in accordance with the determined mode.

Claim 34 (previously presented): A method of managing a file lifecycle according to claim 33 wherein the modes of deletion include secure deletion and insecure deletion.

Claim 35 (previously presented): A method of managing a file lifecycle according to claim 27 wherein files stored in the virtual cabinet are stored within a same virtual storage medium and

wherein files stored within each drawer from the plurality of virtual drawers are stored on the one or more similar storage media associated with said drawer.

Claim 36 (previously presented): A method of managing a file lifecycle according to claim 35 wherein a single virtual drawer forms part of a plurality of virtual cabinets.

Claim 37 (Previously presented): A method of managing a file lifecycle according to claim 27 wherein the step of determining an action comprises the steps of:

determining from the lifecycle policy a condition;

evaluating the accessed file to determine a presence of the condition; and,

when the condition is met, providing an action associated with the condition as the determined action.

Claim 38 (currently amended): A computer-implemented method of managing a file lifecycle, the computer-implemented method comprising the steps of storing data on a storage medium comprising:

providing a virtual storage medium having a plurality of storage media associated therewith, wherein said plurality of storage media are accessible by a file system in a computer, and having associated therewith a set of lifecycle policies relating to file storage locations within at least one of said plurality of storage media, wherein said lifecycle policies relate to at least ~~two~~ one of: file creation, file retention, file reference, file non-use, file security, file protection, file preservation, cost effective storage of a file, and/or file expiration, wherein a file lifecycle comprises aspects of file management including: file classification ~~and/~~or file storage disposition;

storing said file on at least one of said plurality of storage media within said virtual storage medium accessible by said computer;

upon occurrence of a triggering event, determining from said associated lifecycle policies actions dictated by said lifecycle policies for performance on said file; ~~and~~,

performing said dictated actions on said file; and

providing transparent access to said file regardless of where the file is created, located, or moved to, independently of an application or a user.

Claim 39 (original): A method of managing a file lifecycle according to claim 38 wherein a first storage medium is associated with active files and a last storage medium is associated with archived files and wherein the file is transferred from the first storage medium to the last storage medium in successive stages.

Claim 40 (Previously presented): A method of managing a file lifecycle according to claim 39, wherein a file is automatically transferred to a storage medium most appropriate for its stage of lifecycle determined in accordance with the lifecycle policies.

Claim 41 (Previously presented): A method of managing a file lifecycle according to claim 40 wherein the lifecycle policies relate to at least some of: the associated storage medium, the file name, the file extension, the file creation date, the file access date, the file last access date, the file creator, and/or the current file owner.

Claim 42 (Previously presented): A method of managing a file lifecycle according to claim 38 wherein the step of storing the file on a storage medium comprises the step of determining, in accordance with the lifecycle policies, expiration data relating to when the file is to be moved.

Claim 43 (original): A method of managing a file lifecycle according to claim 42 wherein the step of automatically determining when the file is to be moved comprises the step of comparing the expiration data to present time data to determine if it is indicative of the file having expired its time on the storage medium.

Claim 44 (original): A method of managing a file lifecycle according to claim 38 wherein the event relates to an amount of free space on the storage medium.

Claim 45 (original): A method of managing a file lifecycle according to claim 38 wherein the event relates to an amount of space occupied by files of an individual compared to a quota of space allocated to that individual.

Claim 46 (original): A method of managing a file lifecycle according to claim 38 wherein the event relates to at least one of initial storage of a file and modification of said file.

Claim 47 (Previously presented): The method of claim 1, wherein said storing said file comprises the steps of:

requesting a file to be stored in a virtual cabinet in a virtual volume;

evaluating file storage criteria based on cabinet policies of the virtual cabinet to determine a physical location wherein the file is to be stored; and,

storing the file in the determined physical location.

Claim 48 (previously presented): A method of managing a file lifecycle according to claim 47 wherein the cabinet policies relate to file types of the file to be stored.

Claim 49 (previously presented): A method of managing a file lifecycle according to claim 48 wherein a virtual cabinet comprises a virtual drawer and wherein a virtual drawer forms part of more than one virtual cabinet.

Claim 50 (previously presented): A method of managing a file lifecycle according to claim 49 wherein the virtual cabinet forms a context within a context based file lifecycle management system and wherein a file created within a context of a virtual cabinet being subject to the policies of said virtual cabinet.

Claim 51 (previously presented): A method of managing a file lifecycle according to claim 47 wherein the step of storing the file comprises the step of storing the file in association with the virtual cabinet.

Claim 52 (previously presented): A method of managing a file lifecycle according to claim 51 wherein the file is governed by policies of the associated virtual cabinet and wherein some actions dictated by those policies are performed on the file throughout its lifecycle.

Claim 53 (previously presented): The method of claim 1, wherein said storing said file comprises the steps of:

selecting a virtual drawer within a virtual cabinet;

requesting a file to be stored in the virtual drawer;

evaluating file storage criteria based on lifecycle policies associated with the virtual cabinet; and

in accordance with the file storage criteria, storing the file in association with the virtual cabinet.

Claim 54 (previously presented): A method of managing a file lifecycle according to claim 53 wherein the file is stored within the virtual drawer and is accessible within the virtual drawer within each of a plurality of virtual cabinets.

Claim 55 (Previously presented): A method of managing a file lifecycle according to claim 53 wherein the lifecycle policies relate to duplication of file data within a plurality of files.

Claim 56 (Previously presented): A method of managing a file lifecycle according to claim 55 wherein the lifecycle policies relate to load balancing for the virtual cabinet based on access to data that is stored in duplicate.

Claim 57 (Previously presented): A method of managing a file lifecycle according to claim 53 wherein the lifecycle policies relate to one of replication, backup, mirroring, and redundancy of file data storage within the virtual cabinet.

Claim 58 (Previously presented): A method of managing a file lifecycle according to claim 57 wherein the lifecycle policies relate to load balancing for the virtual cabinet based on access to data that is stored in more than one physical location.

Claim 59 (Previously presented): A method of managing a file lifecycle according to claim 53 wherein the lifecycle policies relate to version control.